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Intracellular Staining in Neurobiology

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This book, the first in the field, brings together contributions by an international group of researchers who survey current experience with intracellular staining in living nerve cells. This method originated with the discovery that Procion dye, after being injected into a living neuron, would migrate throughout the cell without impairing electrical activity. Subsequently the anatomy of the dyed cell could be revealed by fluorescence microscopy.
Techniques for the correlation of cellular electrical activity and three-dimensional neuronal geometry using Procion dyes and cobalt ions are described. Several sections deal with the applications of intracellular staining to the study of the nervous system in major invertebrate and vertebrate groups.

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